

Division of Energy & Climate Public Workshops

on

Energy Efficiency Industrial (E2I)
Energy Efficiency Investment Fund (EEIF)

October 30th – Lukens Drive
October 31st – R&R



Agenda

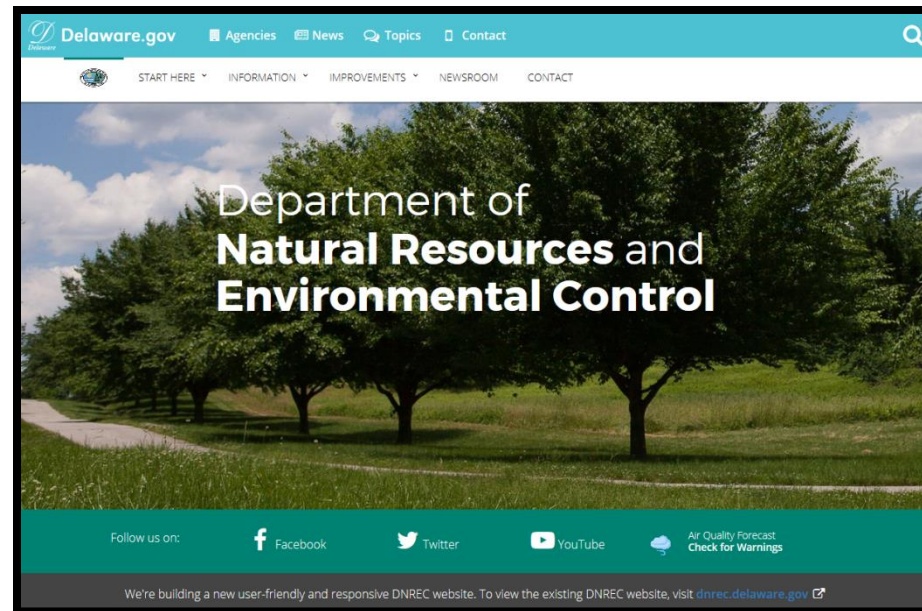
- Introductions
- E2I detailed overview
- EEIF brief overview
 - Guidelines
 - CHP
 - Participating Contractors



What is DNREC?

Department of Natural Resources and Environmental Control

Mission: to ensure the wise management, conservation, and enhancement of the State's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life and educate the public on historic, cultural, and natural resource use, requirements and issues.



Shawn M. Garvin

Updated as of April 10, 2017

Shawn M. Garvin
Cabinet Secretary

Vacant
Administrative Specialist

Administration
(8 FTE)

Kara S. Coats
Deputy Secretary

Robert Zimmerman
Chief Operating Officer

Office of
Environmental Protection

Office of
Natural Resources

Coastal Programs
(16 FTE)

Kimberly Cole
Administrator

Community Services
(3 FTE)

Pat Emory
Director

Environmental Crimes
Unit
Chief Jim Fiedtke (12 FTE)

Public Affairs
(8 FTE)

Carol Riggs
Chief

Administrative Law
Services
(3 FTE)

Robert Haynes
Sr. Public Hearing
Officer

Lisa Vest
Public Hearing Officer

Sue Salter
Enforcement & POA
Coordinator

Attorney General
(7 FTE)

Deputy Attorney General
Ralph Durheim
Environmental Unit Head

Human
Resources
(8 FTE)

Marissa Johnson
Human Resources
Manager II

Environmental
Finance
(12 FTE)

Terry
Deputy
Chief of
Administration

Budget
Development &
Federal Aid
Coordination

Ruth Anne Jones
Sr Fiscal Mgmt
Analyst

Fiscal
Management
(40 FTE)

Carrie Erickson
Controller II

Procurement &
Contracts

Brian Leahy
Deputy Principal
Assistant

Continuous
Improvement &
Service
Enhancement

Celia Caswell-Carter
Deputy Principal
Assistant

Web and Digital
Media

Mike Mahaffie
Director

Information
Technology
(20 FTE)

Colleen Gause
Team Leader

Security Systems
& Continuity of
Operations

Jamie Roy
Manager

Air Quality
(68 FTE)

All Mirzakhani
Director

Administration
(8 FTE)

Operations & Analytical
Support
(8 FTE)

Engineering &
Compliance
(25 FTE)

Planning
(30 FTE)

Waste & Hazardous
Substances
(109 FTE)

Majorie Crofts
Director

Administration
(4 FTE)

Emergency Prevention
& Response
(12 FTE)

Site Investigation
& Restoration
(31 FTE)

Solid & Hazardous
Waste Management
(26 FTE)

Tank Management
(26 FTE)

Water
(159 FTE)

Virgil Holmes
Director

Administration
(3 FTE)

Water Supply
(18 FTE)

Surface Water
Discharges
(12 FTE)

Ground Water
Discharges
(25 FTE)

Environmental
Laboratory
(32 FTE)

Wetlands &
Subaqueous Lands
(9 FTE)

Energy & Climate
(22 FTE)

Susan Love
Robert Underwood
Acting Directors

Administration
(3 FTE)

Energy Programs
(7 FTE)

Climate & Planning
(6 FTE)

Weatherization
(5 FTE)

Watershed Stewardship
(69 FTE)

Robert Palmer
Acting Director

Administration and Support

Conservation Programs
Section

Shoreline & Waterway
Management
(20 FTE)

Watershed Assessment
and Management
Section

Parks & Recreation
(145 FTE)

Ray Bivens
Director

Administration & Support
(12 FTE)

Planning, Preservation &
Development
(16 FTE)

Operations, Maintenance &
Programming
(156 FTE)

Northwest
Region

Coastal
Region

Inland
Pond
Region

Fish & Wildlife
(117 FTE)

Dave Savickis
Director

Administration & Support
(1 FTE)

Federal Aid Coordination
(8 FTE)

Wildlife
(37 FTE)

Fisheries
(22 FTE)

Mosquito Control
(13 FTE)

Enforcement
(35 FTE)



Division of Energy and Climate



Mission: To enhance Delaware's quality of life through innovative policies, programs and education that promote clean, efficient energy use and climate change readiness.

The screenshot shows the official website of the Delaware Division of Energy and Climate. The header includes the Delaware.gov logo and navigation links for Agencies, News, Topics, and Contact. Below the header, the page title "Division of Energy and Climate" is displayed in a large, teal font. A "Listen" button is visible. The main content area describes the division's role in leading statewide climate change mitigation and adaptation programs, providing grants for energy efficiency and clean fuel technology, and supporting energy policy development. The mission statement is repeated: "To enhance Delaware's quality of life through innovative policies, programs and education that promote clean, efficient energy use and climate change readiness." To the right, the division's logo is shown, featuring a stylized globe and the text "Delaware Division of ENERGY & CLIMATE" and "Clean Energy. Sustainable Communities. Livable Climate." Below the main text, there are three columns: "Livable Climate" (describing the use of science to understand climate change), "Renewable Energy" (describing the promotion of renewable energy through assistance and requirements), and "Energy and Climate News" (listing recent news items, including "Governor Carney Signs Executive Order Establishing Offshore Wind Working Group" and "DNREC Division of Energy & Climate").



Clean Energy. Sustainable Communities. Livable Climate.



What is E2I?

Energy Efficiency Industrial

E2I is an energy efficiency program designed to support the unique needs and complex energy projects of Industrial and Large Commercial Businesses within Delmarva Power & Light (DPL) service territory



What is E2I?

As a result of the DPL-Exelon merger agreement DNREC was provided \$8M to administer an industrial/commercial grant and loan program for Delmarva customers (PSC Docket No. 14-193)



Gas Delivery Service Area
(gas may not be available in all areas)



Electric
Delivery
Service Area



Eligibility

Delmarva Power & Light Customers whose

Annual Energy
Consumption

≥

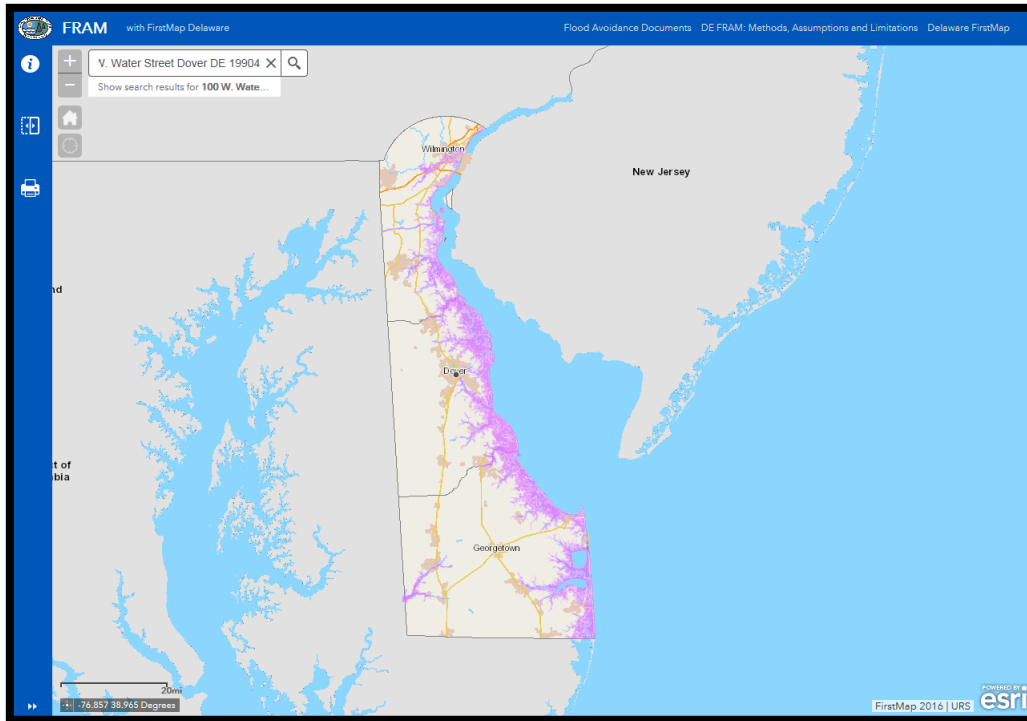
10,000 MWh
OR
95,000 MMBtu



Installations must be designed to avoid impacts from:

- 1) Flooding
- 2) Future sea-level rise

Flood Risk Adaptation Map (FRAM)



www.firstmap.delaware.gov/FRAM

- ❖ Applicants should utilize the FRAM to determine if they are within the one-hundred year, one-meter, sea-level rise flood plan
- ❖ If applicants are within this area – they must submit a flood mitigation plan with application

Program Limits

Grant cannot exceed 30% of the Total Project Cost
and

DNREC Loan can be used in-tandem with grant.
Loan approval does not compromise an applicant's
eligibility



Total Project Cost

Grant Structure: Custom

All amounts are based off of
first year annual energy
savings


- \$0.14/kWh
- \$5/MMBtu
- \$500-\$700/kW

	FIRST YEAR kWh REDUCTION OR INCREASE (ANNUAL)					
	SUMMER ^a			WINTER ^b		
PEAK ENERGY	kWh			kWh		
OFF-PEAK ENERGY	kWh			kWh		
	FIRST YEAR kW ^c REDUCTION OR INCREASE					
	JUNE	JULY	AUGUST	DECEMBER	JANUARY	FEBRUARY
AVERAGE PEAK						
NATURAL GAS REDUCTION OR INCREASE				MMBtu		


Grant Structure: Prescriptive

Only lighting is available prescriptively.

Savings from lighting improvements must be independently accounted for and not included in custom application.



Delaware Energy Efficiency Industrial
Prescriptive Grant Application
DNREC Division of Energy and Climate
 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480



LIGHTING APPLICATION

Applicant Name:
Control Number:

General Requirements

These lamps should be applied in accordance with national best practices in lighting design such as IESNA Recommended Practices and lighting power densities prescribed by local and state building codes.

High Performance T8 (HPT8) Linear Fluorescent System: To be eligible for rebates, all T8 lamps and ballasts must be HPT8 and listed on the Consortium for Energy Efficiency's (CEE) Qualifying Products List available at <http://library.cee1.org/content/commercial-lighting-qualifying-products-lists>.

Description	Specification	Rebate per Fixture
Relamp / Reballast to HPT8	Must use low ballast factor Must be an upgrade of an existing T8 or T12	\$5
New HPT8 Fixture	Must use low ballast factor Includes any HPT8 fixture type	\$5
New or Retrofit 2-Lamp HPT8 High Efficiency Troffer Fixture	Must use low ballast factor Fixture efficiency must be 80% or greater	\$15
New HPT8 High Bay Fixture	Must use low ballast factor Fixture efficiency must be 85% or greater	\$25

T5 Linear Fluorescent Systems

Description	Specification	Rebate per Fixture
New T-5 Fixture	Includes any T5 fixture type	\$5
New or Retrofit 2-lamp T5 High Efficiency Troffer Fixture	Fixture efficiency must be 85% or greater	\$15
New T5HO High Bay Fixture	Fixture efficiency must be 90% or greater	\$30

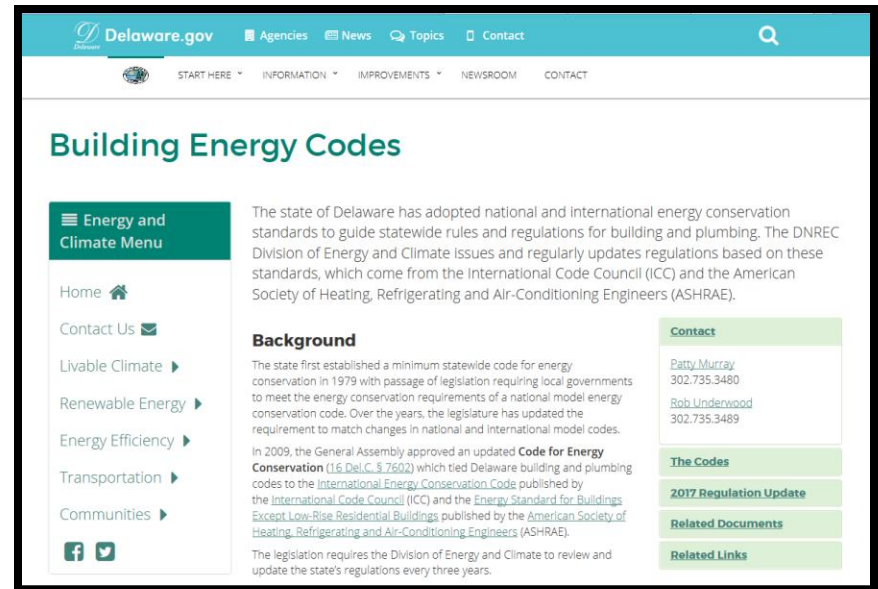
Interior LED Lighting

Description	Specification	Rebate per Fixture
LED Linear Lamp	Must be DesignLights Consortium qualified http://www.designlights.org/QPL	\$8
LED Screw-based lamps	Must be ENERGY STAR qualified http://www.energystar.gov/productfinder/product/	\$7
Recessed and Surface/ Pendant-mounted Downlight Fixtures	Must be ENERGY STAR qualified http://www.energystar.gov/productfinder/product/	\$20
Track Lighting Fixtures	Must be DesignLights Consortium qualified	\$30 per head
Refrigerated Case Fixtures	Must be DesignLights Consortium qualified	\$10 per foot
Freezer Case Fixtures	Must be DesignLights Consortium qualified	\$10 per foot
Display Case Fixtures	Must be DesignLights Consortium qualified	\$10 per foot
1'X4' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified	\$40
2'X2' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified	\$40
2'X4' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified	\$40
High- and Low-Bay Fixtures	Must be DesignLights Consortium qualified	\$100

Program Structure

Only savings achieved
above minimum building
energy codes will be paid

de.gov/energycodes



Program Structure

ADDITIONAL PROJECT BENEFITS	
Please describe any other cost, environmental or job benefits that are a result of this project. Please provide documentation/calculations to support claimed benefits.	
Operation and Maintenance Savings (\$)	
Water Savings	Gallons
Emissions Reductions	
Jobs Created	
Other Savings	

ENERGY USE DATA ACCESS
The applicant must agree to provide a minimum of 12 months pre-installation and 24 months post-installation utility data. Please indicate below how this data will be provided to DNREC (SELECT ONE).
<input type="checkbox"/> Provide written authorization to your utility (or utilities) allowing DNREC to access energy use data.
<input type="checkbox"/> Provide utility bill directly to DNREC on a monthly basis for 24 months post-installation

MEASURE CATEGORIES INCLUDED IN PROJECT
The applicant must include at least 5 different measure categories in the project (SELECT AT LEAST 5).
<input type="checkbox"/> Building envelope
<input type="checkbox"/> Steam/boiler system improvements
<input type="checkbox"/> Process heat recovery
<input type="checkbox"/> Combined heat and power (CHP)
<input type="checkbox"/> Compressed air improvements
<input type="checkbox"/> Chiller plant improvements
<input type="checkbox"/> Variable speed drives
<input type="checkbox"/> Heating ventilation and air conditioning (HVAC) improvements
<input type="checkbox"/> Plug load controls
<input type="checkbox"/> Service water heating improvements
<input type="checkbox"/> Lighting power density improvements beyond code (using a mix of daylighting, delamping, highly reflective interior surfaces, and fixture efficiency)
<input type="checkbox"/> Other process improvements, where applicable

Delaware E2I Program Custom Grant Application 5 of 8

Applicant must include a minimum of **FIVE** energy improvement categories in project

***Lighting improvements do not count toward the minimum ***

Program Structure

Bonus

Projects that include more than five different improvement categories that are each at least 5% of the total project savings will receive consideration for a *higher \$/kW – up to \$700 kW*



Requirements

- Must include draft Measurement & Verification (M&V) plan with application
- M&V plan must be International Measurement & Verification Protocol (IPMVP) compliant
- Applicant must retain a Professional Engineer (P.E.) on their project team
- Project must be a recommission – new construction is not eligible at this time

EVO | Efficiency Valuation Organization

Home About M&V Products News & Media Subscribe Contact Login

SHAPE M&V policy by serving on relevant committees

TRAINING PARTNERS' NEWS

EVO'S INTENSIVE LEARNING SESSION AT EE GLOBAL

On May 9 2017, EVO organized an Intensive Learning Session during EE Global in Washington. From the left, Tom Dreesen, Chairman of EVO made a presentation on global M&V gap followed by Pierre Langlois, EVO's Vice-Chair, who presented the concept of M&V and provided an introduction to IPMVP. Next in the picture is Steve Kukoda, Executive Director of the International Copper Association, who kindly accepted to moderate the panel. Finally, Kevin Warren, a member of EVO's IPMVP Committee discussed the use of M&V within utility programs.

20 YEARS OF M&V IPMVP PROTOCOL DEVELOPMENT 1997-2017

CORE CONCEPTS
INTERNATIONAL PERFORMANCE MEASUREMENT AND VERIFICATION PROTOCOL

LATEST NEWS

New Chair for EVO's Extended Training Committee

EVO is pleased to announce that Mr Bruce Rowse of Australia, has accepted to chair the Extended Training Committee (ETC). Mr Rowse provides consulting and M&V training services to renewable...

EVO Welcomes a New Organizational Supporter: RSB for Electricity & Water, Government of Dubai

EVO is pleased to announce that the Regulatory & Supervisory Bureau for Electricity & Water of the Government of Dubai has recently joined the select group of EVO's organizational supporters.

TRAINING CALENDAR

October 2017

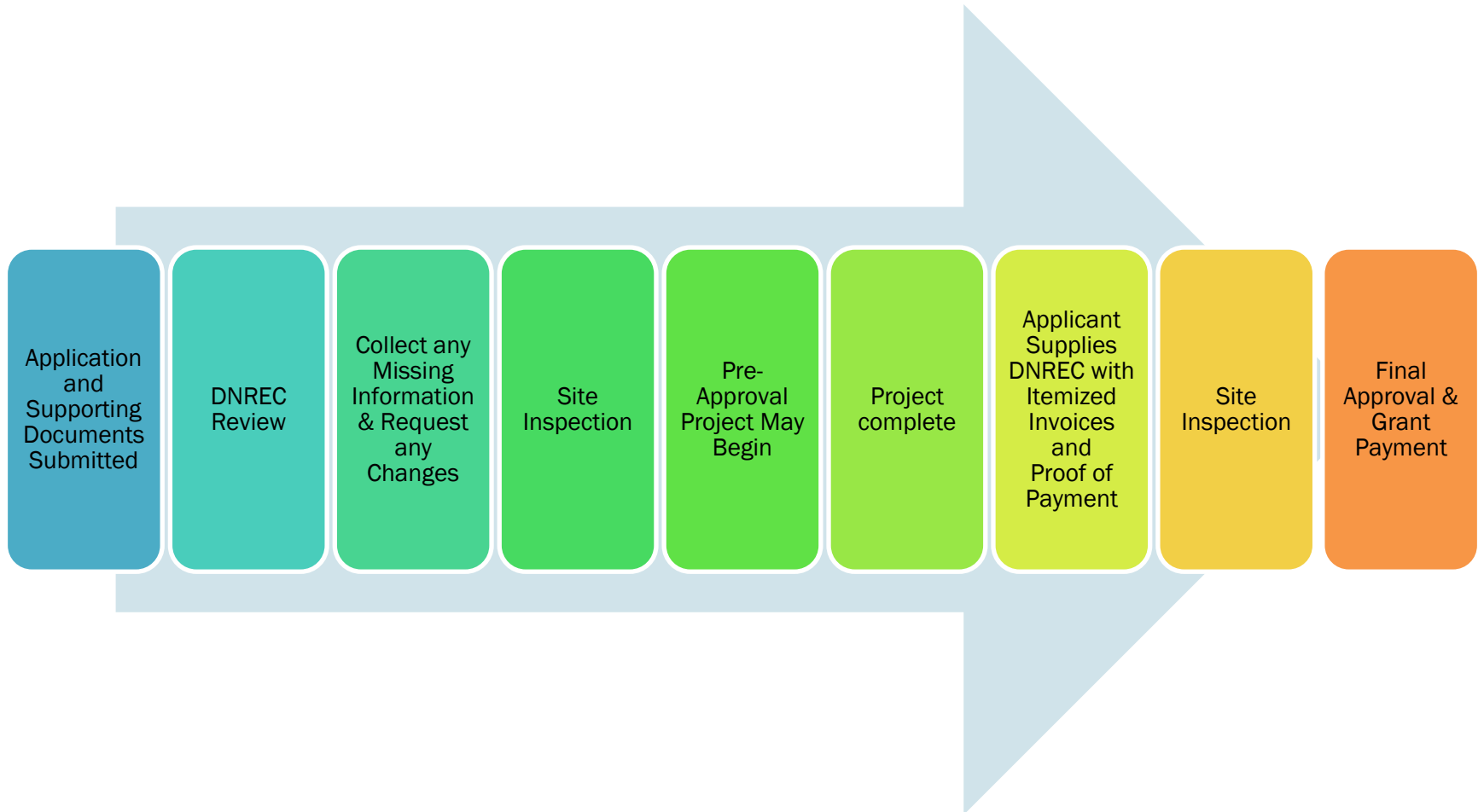
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

An Application Package Will Include

- Complete and signed application
- Project description and detailed scope of work
- Specification sheets for all equipment
- Technical data and testing laboratory information
- Itemized quotes and estimates for all equipment listed
- Twelve consecutive electric and natural gas utility bills
- Recycling/disposal plan of retired equipment
- For each installer involved:
 - Commercial general liability insurance certificate
 - Delaware business license
 - Delaware trade specific license
- Documentation of energy savings calculations and cost estimates for measure from at least 5 improvement categories (not including lighting)
- Proof that a P.E. has verified, signed, and stamped energy savings as claimed
- M&V plan
- Project schedule including milestones report
- Delaware State Substitute W-9 form submitted electronically to <https://w9.accounting.delaware.gov>
- For prescriptive lighting measures:
 - Lighting schedule
 - Ceiling plan
 - Prescriptive application
 - Specification sheets
 - Energy savings calculations



Process



Questions, or interested in applying?

de.gov/E2I

Applications available
November 6, 2017



Energy Efficiency Investment Fund

EEIF

Program Updates and Additional Pathways



The screenshot shows the Delaware.gov website with the "Energy Efficiency Investment Fund" page. The page features a teal header with navigation links: Agencies, News, Topics, and Contact. Below the header is a secondary navigation bar with links: START HERE, INFORMATION, IMPROVEMENTS, NEWSROOM, and CONTACT. The main content area has a teal sidebar on the left titled "Energy and Climate Menu" with links to Home, Contact Us, Livable Climate, Renewable Energy, Energy Efficiency, Transportation, and Communities. The main content area on the right contains a description of the fund, a contact box for Emily St. Clair, and a section for participating contractors. At the bottom, there are four buttons: Energy Assessments, Prescriptive Grants, Custom Grants, and Combined Heat & Power.

Energy Efficiency Investment Fund

The Department of Natural Resources and Environmental Control (DNREC) provides grants through the Energy Efficiency Investment Fund (EEIF) to help commercial and industrial customers replace aging, inefficient equipment and systems with energy efficient alternatives.

Improving the energy efficiency of a business helps to decrease operating costs, reduce energy consumption, and improve environmental performance. Support from the Energy Efficiency Investment Fund is available to perform energy assessments, to take widely recognized (Prescriptive) improvement steps, and to implement custom, site-specific improvements.

To receive periodic updates on the Energy Efficiency Investment Fund, send an email to DNREC.EnergyEEIF@state.de.us.

Participating Contractors

DNREC will publish a list of participating contractors familiar with the Energy Efficiency Investment Fund approval process and capable of installing eligible measures. Companies interested in becoming [participating contractors](#) may apply starting **Nov. 6, 2017**.

Contact
[Emily St. Clair](#)
302.735.3366
[Program Guidelines and Operational Procedures](#)
[Energy Efficiency Investment Fund Annual Report](#) (2017)

[Energy Assessments](#) [Prescriptive Grants](#) [Custom Grants](#) [Combined Heat & Power](#)



Quick Refresher

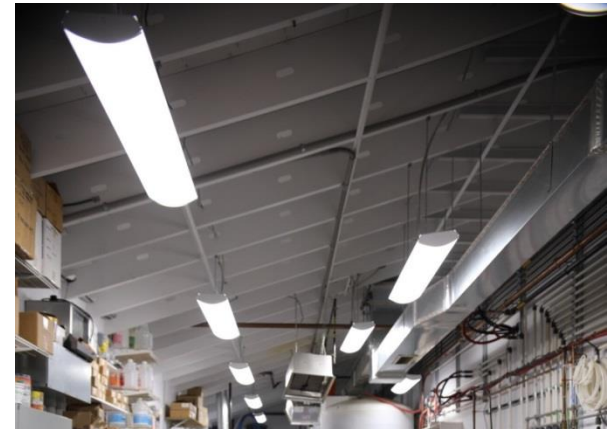
Energy Efficiency Investment Fund

- Improving the energy efficiency of a business
- Decreases operating costs
- Reduces energy consumption
- Improves Environmental Performance (Green Portfolio)



Del. C. 29 §8030 (b)

“The Department shall support implementation of projects that reduce the use of gas, electricity, or other sources through the issuance of competitive grants, low-interest loans, or other financing support from the Fund.”



Quick Refresher

How does EEIF help me?

- ✓ Lowers the cost of doing business

You don't pay for energy you don't use!

- ✓ Reduces cost of installing efficient indoor and outdoor lighting, building systems upgrades, and more

Make much needed capital upgrades!



Quick Refresher Program Limits

Grant cannot exceed 30% of the Total Project Cost
and

DNREC Loan can be used in-tandem with grant.
Loan approval does not compromise an applicant's
eligibility



Total Project Cost

Updates

Our Program Guidelines
and Operational
Procedures have been
updated

Be sure to read them!

de.gov/eeif

Delaware Energy Efficiency Investment Fund

**Program Guidelines and
Operational Procedures**

Version 2017.1

Effective November 2017



Program Overview

Pathways

Assessment

Help facilities receive technical evaluations for appropriate cost-effective energy efficiency improvements specific to each building's needs

Types of Applications:

- single purpose (targeted) energy audits
- comprehensive energy audits

Prescriptive

Pre-determined measures based upon industry standards.

Types of Applications:

- prescriptive lighting
- vending misers
- natural gas heating and water heating equipment

Custom

“Catch-All” for innovative energy projects.

Examples:

- Building Envelope
- Chillers/Boilers
- Energy Management Systems
- Pumping Systems
- Demand Control Ventilation

Combined Heat & Power

Ideal for facilities with high annual hours of operation and a high thermal load. There are five types of eligible systems.

Types of Systems:

- Microturbines
- Reciprocating engines
- Gas Turbines
- Steam turbines
- Fuel Cells

Program Overview

Pathways			
Assessment	Pre-retrofit	Custom	Combined Heat & Power
<p>Help facilities receive technical evaluations for appropriate cost-effective energy efficiency improvements specific to each building's needs</p> <p>Types of Applications:</p> <ul style="list-style-type: none">• single purpose (targeted) energy audits• comprehensive energy audits	<p>Examples:</p> <ul style="list-style-type: none">• Building Envelope• Chillers/Boilers• Energy Management Systems• Pumping Systems• Demand Control Ventilation	<p>Examples:</p> <ul style="list-style-type: none">• Building Envelope• Chillers/Boilers• Energy Management Systems• Pumping Systems• Demand Control Ventilation	<p>Ideal for facilities with high annual hours of operation and a high thermal load. There are five types of eligible systems.</p> <p>Types of Systems:</p> <ul style="list-style-type: none">• Microturbines• Reciprocating engines• Gas Turbines• Steam turbines• Fuel Cells

Energy Assessments

Energy Efficiency Investment Fund

Energy Assessment Grant Application

The Energy Efficiency Investment Fund provides funds to offset the cost of an energy assessment and to encourage the implementation of the recommendations in the energy assessment report.

Applicants will complete **Part 1** Form for grant approval by DE&C. Grant funds are paid by reimbursement after the assessment is complete and when **Part 2** of the Application has been received and approved by DE&C.

Part 1

Contact Information	
Name of Applicant:	
Facility Name:	
Facility Project Address:	
Contact Name and Title:	
Mailing Address:	
Phone:	
Email:	
Are you interested in discussing loan opportunities () Yes () No	

Application Information	
Type of energy assessment (check one):	<input checked="" type="checkbox"/> Single Purpose/Targeted Energy Audit <input type="checkbox"/> Comprehensive Audit, ASHRAE Level II Compliant
Assessment to be Performed By:	
Cost of assessment:	
Requested Grant Amount (50% of total cost):	
Proposal Submission:	Please submit an electronic copy of the energy assessment PROPOSAL to DNREC.EnergyEEIF@state.de.us

Disclaimer

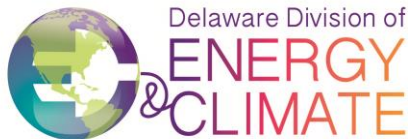
Acceptance of this application is dependent on DE&C approval of the Scope of Work, qualifications and independence of the proposed vendor, and cost proposal. Acceptance into the program does not constitute endorsement or approval of the energy audit report or any other finding. The applicant must meet all program rules to receive incentive funds from the EEIF program. **DE&C is not responsible for work performed by third parties.**

Assessments or “Audits”

=

Your Playbook

- Single Purpose/Targeted audit
 - Lighting
 - Refrigeration
 - Heat recovery
 - Energy management systems
 - Compressed air systems
 - Motors
 - Drives
- Comprehensive audit
 - Must be ASHRAE Level II Compliant



Energy Assessments

Rebate Incentive Levels

50% of Total Project Costs



- Targeted – Up to \$10,000
- Comprehensive – Up to \$20,000



Energy Efficiency Investment Fund	
Energy Assessment Grant Application	
Part 2	
Approved applicants that have completed their energy assessment should submit <i>Part 2</i> with an invoice to the Department for grant reimbursement.	
Contact Information	
Applicant Name:	
Facility Address:	
Contact Name:	
Mailing Address:	
Phone:	Email:
Application Information	
Type of energy assessment (check one):	<input checked="" type="checkbox"/> Single Purpose/Targeted Energy Audit <input type="checkbox"/> Comprehensive Audit, ASHRAE Level II Compliant
Assessment performed by:	
Date of energy assessment:	
Total Cost of assessment:	
Grant Amount (from award approval letter):	
Payment Information	
<input type="checkbox"/> I have completed the energy assessment and I am requesting payment of the grant.	
<input type="checkbox"/> I have attached a copy of the Energy Assessment Invoice from the Firm that performed it.	
<input type="checkbox"/> I have attached proof of my payment in full to the Energy Assessment Firm.	
<input type="checkbox"/> I have attached a copy of the final Energy Assessment Report.	
<input type="checkbox"/> I have submitted the report electronically to DNREC.EnergyEEIF@state.de.us .	
<input type="checkbox"/> I am planning to implement some or all of the measures recommended in the report.	
<input type="checkbox"/> I am not planning to implement the recommended measures at this time.	
<input type="checkbox"/> I have completed the Substitute Form W-9 , which the State of Delaware requires for payment, and I have submitted it electronically to https://w9.accounting.delaware.gov .	
Applicant Representative Signature:	Date Submitted:
Applicant Representative Printed Name:	



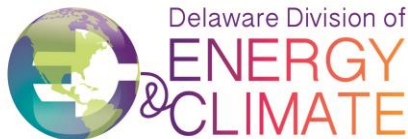
Prescriptive

 Delaware Energy Efficiency Investment Fund Prescriptive Grant Application <small>DNREC Division of Energy and Climate 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480</small>		
LIGHTING APPLICATION		
Applicant Information		Control Number:
Name of Company:		
Site Address:		
City:	State:	Zip code:
Mailing Address:		
City:	State:	Zip code:
Name of Contact Person:		
Email:		
Office Phone:		
Select organization type:		
<input type="checkbox"/> Corporation	<input type="checkbox"/> Partnership	<input type="checkbox"/> Individual/Sole Proprietor
<input type="checkbox"/> Tax Exempt Non-profit		
Contractor Information (If applicable)		
Name / Company:		DE Business License #
Trade Specific License and/or Certification #:		
Email:		Daytime Phone:
Mailing Address:		
City:	State:	Zip code:
<small>Grant payments are typically processed to the applicant. The applicant's signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.</small> Applicant Signature: _____ Date: _____		
Installer Information (If applicable)		
Name / Company:		DE Business License #
Trade Specific License and/or Certification #:		
Email:		Daytime Phone:
Mailing Address:		
City:	State:	Zip code:
<small>Grant payments are typically processed to the applicant. The applicant's signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.</small> Applicant Signature: _____ Date: _____		
Vendor Information (If applicable)		
Name / Company:		DE Business License #
Trade Specific License and/or Certification #:		
Email:		Daytime Phone:
Mailing Address:		
City:	State:	Zip code:
<small>Grant payments are typically processed to the applicant. The applicant's signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.</small> Applicant Signature: _____ Date: _____		
Site Information		
Square footage:	Number of floors:	
Year built:	Building type (office, hospital, etc):	
Annual hours of operation:	Building heat check all that apply:	
	Electric <input type="checkbox"/> Steam <input type="checkbox"/> Natural Gas <input type="checkbox"/> Oil <input type="checkbox"/> Other <input type="checkbox"/>	

Prescribed measures contain technologies where energy savings can be predicted with reasonable accuracy across all applications.

The technologies currently eligible for the program include:

- lighting equipment
- high efficiency commercial gas heating equipment, hot water heaters
- vending misers



Where to Find the Rebate Levels:



Lighting –
Pages 4&5



Vending Miser –
Page 3

NG Heat & Water
Heat –
Page 3

All capped at 30%
of Total Project Cost

Prescriptive



 Delaware Energy Efficiency Investment Fund Prescriptive Grant Application DNREC Division of Energy and Climate 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480		
NATURAL GAS HEATING AND WATER HEATING EQUIPMENT		
Applicant Name:		Control Number:
General Requirements		
Heating Equipment		

 Delaware Energy Efficiency Investment Fund Prescriptive Grant Application DNREC Division of Energy and Climate 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480		
LIGHTING APPLICATION		
Applicant Name:		Control Number:
General Requirements		
These lamps should be applied in accordance with national best practices in lighting design such as IESNA Recommended Practices and lighting power densities prescribed by local and state building codes.		
High Performance T8 (HPT8) Linear Fluorescent System: To be eligible for rebates, all T8 lamps and ballasts must be HPT8 and listed on the Consortium for Energy Efficiency's (CEE) Qualifying Products List available at http://library.cee1.org/content/commercial-lighting-qualifying-products-lists .		
Description	Specification	Rebate per Fixture
Relamp / Reballast to HPT8	Must use low ballast factor Must be an upgrade of an existing T8 or T12	\$5
New HPT8 Fixture	Must use low ballast factor Includes any HPT8 fixture type	\$5
New or Retrofit 2-Lamp HPT8 High Efficiency Troffer Fixture	Must use low ballast factor Fixture efficiency must be 80% or greater	\$15
New HPT8 High Bay Fixture	Must use low ballast factor Fixture efficiency must be 85% or greater	\$25

Specification	Rebate per Unit
Water with Electronic or (ECM)	\$500
Water with ECM	\$800
Thermal efficiency	\$750
	\$750
Water	\$1,000
Water	\$1,500

Specification	Rebate per Unit
Efficiency of .82 or greater	\$500
Water	\$800
Thermal efficiency rating > 85% or	\$400
Thermal efficiency	\$500
Hot water	\$25

Specification	Rebate per Unit
	\$225 each
Water project requires pre-approval	\$50 each
	\$25 each



 Delaware Energy Efficiency Investment Fund Prescriptive Grant Application DNREC Division of Energy and Climate 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480		
VENDING MISER		
Applicant Name:		Control Number:
General Requirements		
All Vending Machine and Cooler Sensors must be installed on vending/cooler equipment scheduled to remain in service for a minimum of 3 years. Only refrigerated beverage vending machines, glass-front refrigerated coolers and non-refrigerated snack vending machines with lighting that containing nonperishable goods and that are installed indoors are eligible.		
Vending Equipment		
Description	Rebate per Fixture	
Refrigerated Beverage Vending Machine	\$115	
Non-Refrigerated Vending Machine	\$45	
Glass Front Refrigerated Coolers	\$115	

Specification	Rebate per Fixture
Includes any T5 fixture type	\$5
Fixture efficiency must be 85% or greater	\$15
Fixture efficiency must be 90% or greater	\$30

Specification	Rebate per Fixture
Must be ENERGY STAR qualified http://www.energystar.gov/productfinder/product/	\$8
Must be ENERGY STAR qualified http://www.energystar.gov/productfinder/product/	\$7
Must be ENERGY STAR qualified http://www.energystar.gov/productfinder/product/	\$20
Must be DesignLights Consortium qualified http://www.designlights.org/QPL	\$30 per head
Must be DesignLights Consortium qualified	\$10 per foot
Freezer Case Fixtures	Must be DesignLights Consortium qualified
Display Case Fixtures	Must be DesignLights Consortium qualified
1'x4' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified
2'x2' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified
2'x4' LED Troffer or Panel Ambient Light Fixtures	Must be DesignLights Consortium qualified
High- and Low-Bay Fixtures	Must be DesignLights Consortium qualified



Custom

 Delaware Energy Efficiency Investment Fund Custom Grant Application			
Division of Energy and Climate 100 West Water Street, Suite 5A, Dover, DE 19904 Phone: (302) 735 - 3480			
Applicant Information		Control Number:	
Name of Company:			
Site Address:			
City:	State:	Zip code:	
Mailing Address:			
City:	State:	Zip code:	
Name of Contact Person:			
Email:			
Office Phone:			
Select organization type:			
<input type="checkbox"/> Corporation	<input type="checkbox"/> Partnership	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Tax Exempt Non-profit
Contractor Information (if applicable)			
Name / Company:		DE Business License #	
Trade Specific License and/or Certification #:			
Email:		Daytime Phone:	
Mailing Address:			
City:	State:	Zip code:	
Grant payments are typically processed to the applicant. The applicants signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.			
Applicant Signature:		Date:	
Installer Information (if applicable)			
Name / Company:		DE Business License #	
Trade Specific License and/or Certification #:			
Email:		Daytime Phone:	
Mailing Address:			
City:	State:	Zip code:	
Grant payments are typically processed to the applicant. The applicants signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.			
Applicant Signature:		Date:	
Vendor Information (if applicable)			
Name / Company:		DE Business License #	
Trade Specific License and/or Certification #:			
Email:		Daytime Phone:	
Mailing Address:			
City:	State:	Zip code:	
Grant payments are typically processed to the applicant. The applicants signature below agrees to transfer the grant payment to the above named company or individual. I hereby certify that I understand that I will not receive the grant payment for this project.			
Applicant Signature:		Date:	
Site Information			
Square footage:		Number of floors:	
Year built:		Building type (office, hospital, etc):	
Annual hours of operation:		Building heating/cooling system apply:	
		<input type="checkbox"/> Electric <input type="checkbox"/> Steam <input type="checkbox"/> Natural Gas <input type="checkbox"/> Oil <input type="checkbox"/> Other	
Benchmarking/Measurement and Verification Information			
Will you be benchmarking your project? <input type="checkbox"/> If yes, who will be performing the benchmarking? (Your organization or a third party)			
If yes, would you be willing to share your data with the Energy Efficiency Investment Fund grant program?			
The State Energy Program Revolving Loan Fund (SEPRLF) can be used to supplement an EEIF grant or as a stand-alone loan. The program offers low-interest loans for installation of energy efficiency measures that, in turn, lower their bills while reducing the environmental impacts of energy production, delivery and use. Loan approval will not compromise an applicant's EEIF grant amount, meaning that loans can be used in combination with a grant to help pay the balance of the project cost. Would you be interested in discussing loan opportunities?			
If yes, please provide the contact information of whom DNREC should contact to discuss these opportunities:			

This option allows for the greatest flexibility and creativity in design by providing an incentive on a facility wide scale or on targeted assessments that save energy.

The projects qualifying under this program are generally more complex and aggressive measures that permanently raise the efficiency levels beyond that of standard equipment.



Custom

- The customized incentives are based on calculated energy and demand savings
- All custom applications require documentation of the energy savings information
- Acceptable forms of documentation include:
 - energy modeling by a consultant or other third party
 - specification sheets for ALL existing and proposed systems
 - and/or signature by a licensed professional engineer (P.E.).

Rebate Levels:

\$0.12/kWh reduced

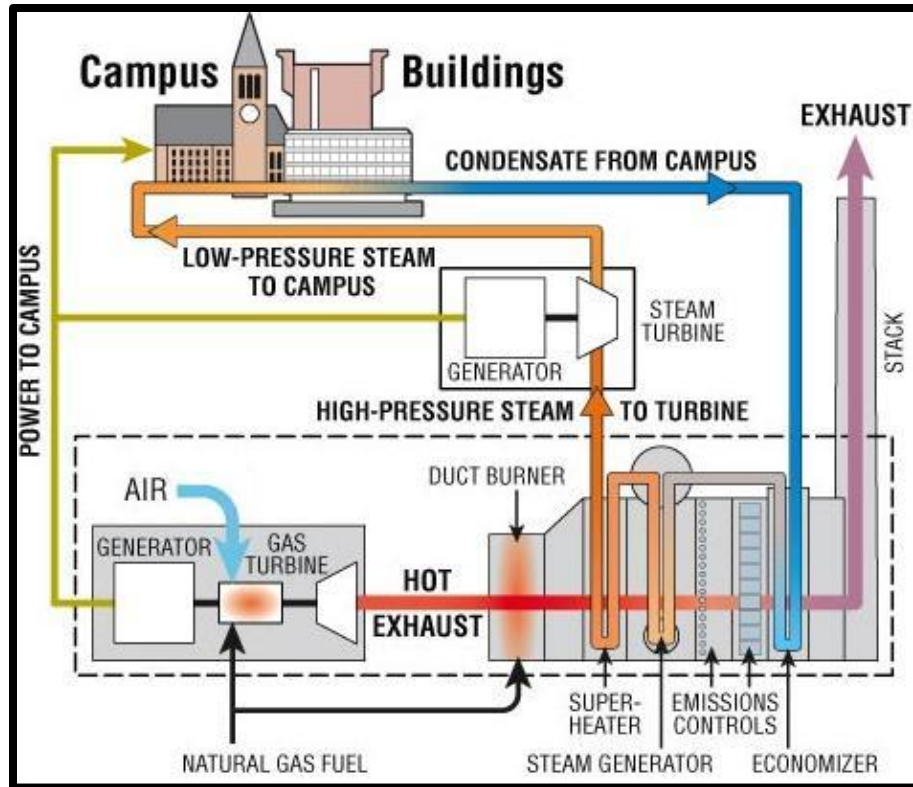
\$5/MMBtu reduced

Capped at 30% of Total Project Costs



Combined Heat & Power (CHP)

NEW!



- Provides greater energy efficiency to facilities with high annual hours of operation
- Reduces energy operating costs
- Provides greater energy resiliency
- Reduces Greenhouse Gas Emissions
- On-site Power Generation
- Limits new demands on electricity grid

System Requirements

- Must be driven by one of the five:
 - Reciprocating Engine
 - Microturbine
 - Steam Turbine
 - Gas Turbine
 - Fuel Cell



System Requirements

- New
- Permanently Installed
- Minimum System Efficiency Level of 60% on an annual basis
- Minimum 1.0 MMBtu/hour of useful thermal output
- Minimum full 3-year warranty



Additional Eligibility

- Expansions to existing systems will only be paid for the incremental increase
- Where Third Party Power Purchase Agreements are involved, applicants must provide the fully executed PPA with application documents



Grant Structure

\$500/kW of installed system size

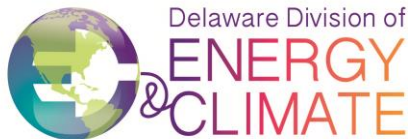
Up to 30% of Total Project Costs

Grants above \$500,000 will not be awarded without
Division Director Signature



CHP Specific Additional Required Documentation

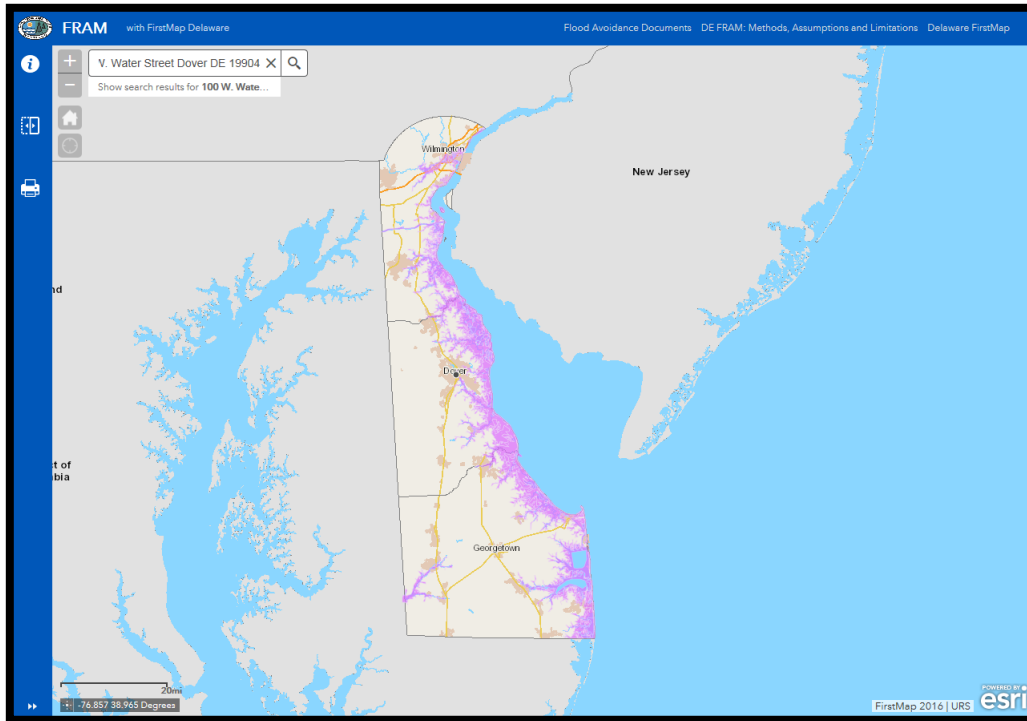
- 12 months of Typical Day Hourly Electric and Heating Load Profile for the installation site
- If system is greater than 800kW a M&V plan must be submitted with application
- Design Plan with P.E. signature showing:
 - Waste-to-heat end use
 - Make and Model of equipment
 - Operation schedule
 - Generation capacity
- Installation and Milestone Schedule
- FRAM Assessment
- Interconnection Agreement (parts 1&2)
- Detailed Energy Model showing:
 - Annual
 - Avoided energy use
 - Overall system efficiency
 - Monthly
 - Electrical generation
 - Heat recovery
 - Fuel input



Installations must be designed to avoid impacts from:

- 1) Flooding
- 2) Future sea-level rise

Flood Risk Adaptation Map (FRAM)



www.firstmap.delaware.gov/FRAM



CHP Pathway Questions?

de.gov/eeif

Applications available
November 6, 2017

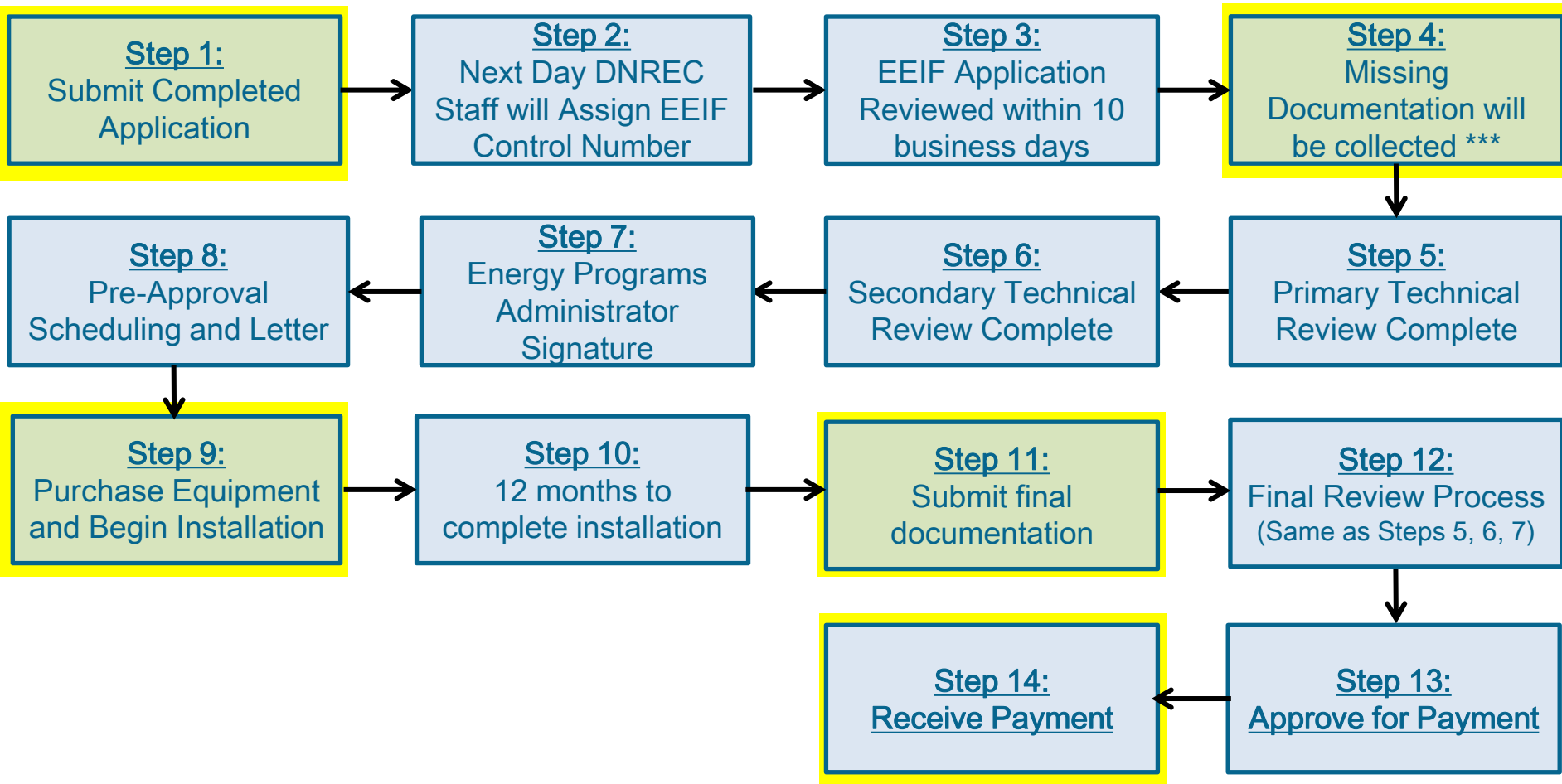


EEIF Process Refresher

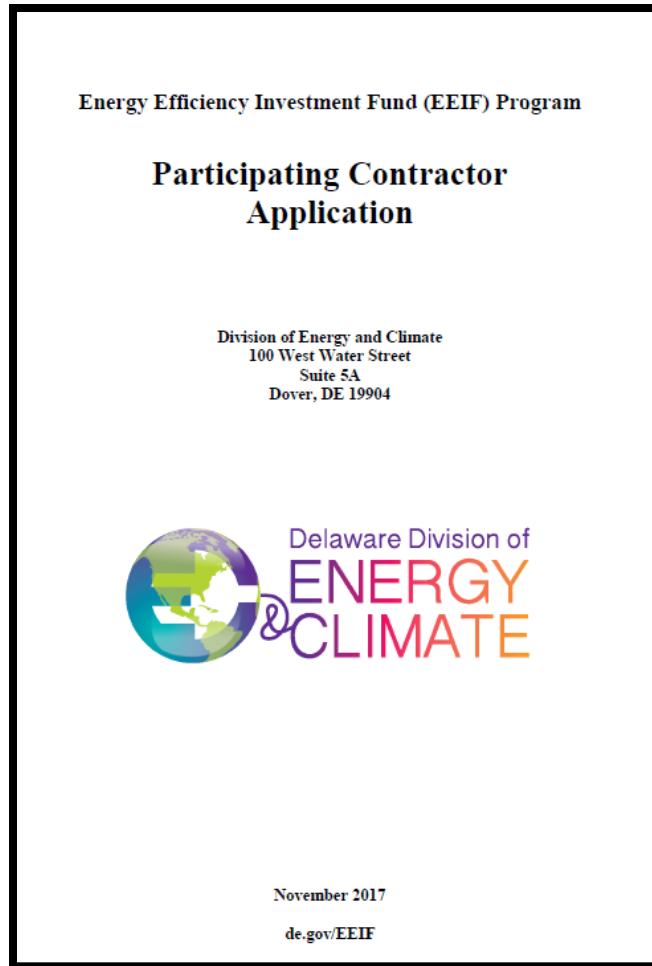
All pathways in EEIF follow the same application process.



Process Overview



Participating Contractors List



Contractors who install eligible measures under the EEIF program may apply to be identified on the EEIF website as retaining the required documentation



Participating Contractors List

What does this do?

- ✓ Benefits potential applicants seeking a contractor
- ✓ Gives potential applicants a starting point
- ✓ Allows DNREC planners to direct inquiries to list of contractors identified
- ✓ Organizes identified contractors by specialty



What does this NOT do?

- ❖ Give any contractors/businesses on list any endorsement from DNREC
- ❖ Preclude eligibility for contractors not identified that have the documentation required by the program



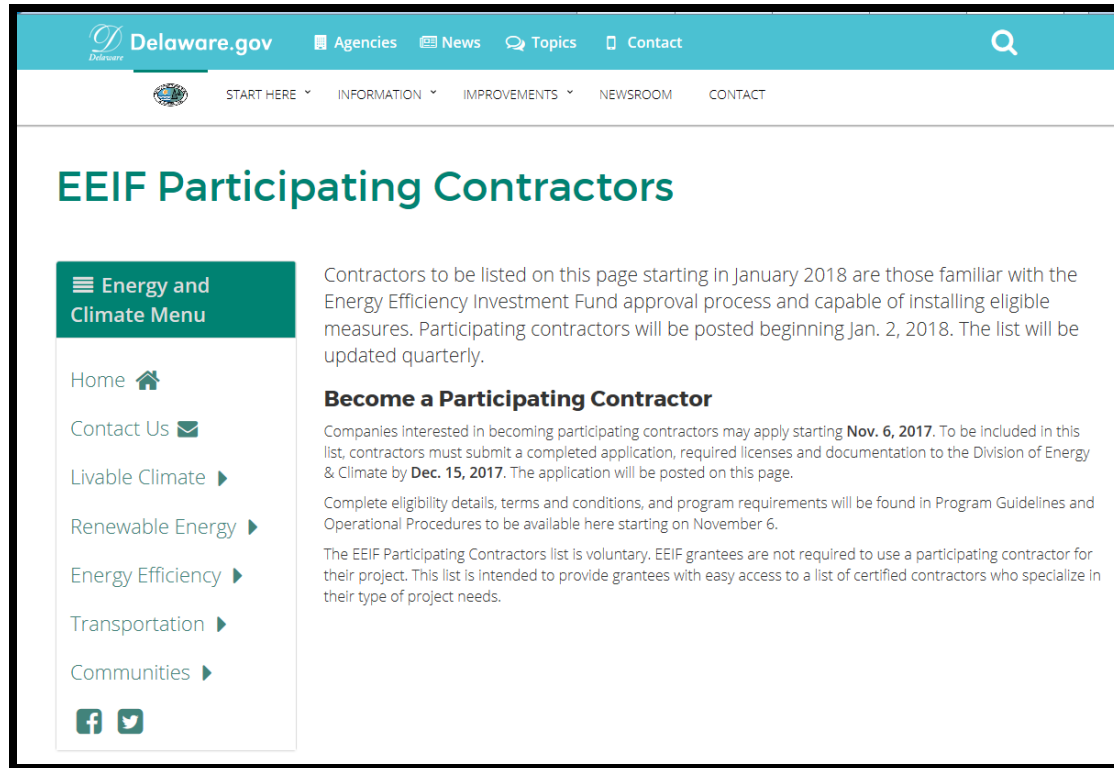
Eligibility

Contractors who wish to be listed must provide proof of the following:

- Delaware Business License
- Delaware Trade Specific License
- Commercial General Liability Insurance in the amount of \$1M or greater
- Relevant Training or Certification
- Statement of Reliability and Good Standing or no negative reports with the BBB
- Date and Location of the three most recently installed relevant energy efficiency measure
- Three customer references for each relevant energy efficiency measure contractor is seeking approval to be listed under



Application Process



November 6, 2017

Application Form will be posted;
DE&C will begin accepting
applications.

December 15, 2017

Deadline for applications for the
first iteration of the Participating
Contractor List. All required
documents and licenses must be
submitted.

January 2, 2018

First version of Participating
Contractor List will be published
on DNREC website

Ongoing

Participating Contractor lists will
be updated quarterly as
additional contractors are
accepted



Are there any questions?



Thank you!

Division of Energy & Climate

Department of Natural Resources and
Environmental Control

de.gov/energyclimate

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facebook.com/energyclimatede

@energyclimatede

EEIF Program

de.gov/eeif

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E2I Program

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EEIF Program – CHP Pathway

de.gov/eeif

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